



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,235	01/21/2004	Kia Silverbrook	MPA22US	2179
24011	7590	11/02/2005	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			DICT, RACHEL S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/760,235		SILVERBROOK ET AL.	
	Examiner		Art Unit	
	Rachel Dicht		2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3 November 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US Pat. No. 6,439,908).

In regard to:

Claim 1:

Silverbrook et al. teaches a printhead system (10, Fig. 2), comprising: at least one printhead module (12, Fig. 2) comprising at least two printhead integrated circuits (chip 18, Fig. 3), each of which has nozzles (42, Fig. 7) formed therein for delivering printing fluid onto the surface of print media, a support member (28, Fig. 8) supporting and carrying the printing fluid for the at least two printhead integrated circuits (chip 18, Fig. 8), and at least two electrical connectors (refer to column 3 lines 64-65 and column 4 lines 6-9) for connecting electrical signals to the respective ones of the at least two printhead integrated circuits (chip 18, Fig. 8); drive electronics incorporating at least one controller for controlling the printing operation of at least one of the at least two printhead integrated circuits (refer to column 3 lines 59-65); and a casing (14, Fig. 2) in which the at least one printhead module and the drive electronics are removably

mounted, wherein each of the at least two electrical connectors is arranged to direct control signals from the at least one controller to the corresponding printhead integrated circuit and to direct power from a power supply to the corresponding printhead integrated circuit and the drive electronics (refer to column 3 lines 57-65).

Claim 2:

Silverbrook et al. teaches a printhead assembly, wherein the at least two electrical connectors each comprise a flexible printed circuit board (22 and 54, Fig. 5) connected to respective ones of the at least two printhead integrated circuits (refer to column 3 lines 64-65 and column 4 lines 6-9).

Claim 3:

Silverbrook et al. teaches a printhead assembly, wherein the drive electronics is provided on a printed circuit board (22, Fig. 8) carrying respective connection ports which are directly aligned with and connected to the respective flexible printed circuit boards and printhead integrated circuits (refer to column 3 lines 57-65).

Claim 4:

Silverbrook et al. teaches a printhead system, further comprising a plurality of longitudinally extending electrical conductors (58 and 60, Fig. 14)

arranged to provide the power from the power supply to the at least two electrical connectors (refer to column 5 lines 27-29 and 43-45).

Claim 5:

Silverbrook et al. teaches a printhead system (10, Fig. 2), wherein: the at least one printhead module (12, Fig. 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (chip 18, Fig. 8), the support member (28, Fig. 8), the at least two electrical connectors (refer to column 3 lines 64-65 and column 4 lines 6-9), and at least one fluid distribution member (30, Fig. 8) mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel (72, Fig. 8) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (72, Fig. 8) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (refer to column 4 lines 41-44).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel Dicht whose telephone number is 571-272-8544. The examiner can normally be reached on 7:00 am - 3:30 pm Monday through Friday.

Art Unit: 2853


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSD



October 19, 2005



MANISH S. SHAH
PRIMARY EXAMINER